AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions, and listings of claims in the application; listing of claims

--1. (Currently Amended) An audio processing apparatus comprising:

first filter means for processing ~~the~~ n-channel audio signals in accordance with predetermined finite impulse response characteristics and for converting the n-channel ([[n ≥ 1,]] where n is a positive integer greater than or equal to 1) audio signals supplied from at least one signal source into two-channel signals;

a pair of second filter means to which the two-channel signals output from the first filter means are respectively supplied for providing an uncorrelated processing by setting different delay times corresponding to respective predetermined transfer functions to the two-channel signals; and

an output unit for respectively supplying signals output from the pair of second filter means to left and right loudspeaker units of a headphone[[.]],

wherein the pair of second filter means each comprise a digital filter providing uncorrelated processing by setting delay times corresponding to the respective predetermined

transfer functions relating to reflective sound components using delay units having different delay times.

--2. (Cancelled)

--3. (Currently Amended) [[The]] An audio processing apparatus ~~according to claim 1,~~ comprising:

first filter means for processing n-channel audio signals in accordance with predetermined finite impulse response characteristics and for converting the n-channel (where n is a positive integer greater than or equal to 1) audio signals supplied from at least one signal source into two-channel signals;

a pair of second filter means to which the two-channel signals output from the first filter means are respectively supplied for providing an uncorrelated processing by setting different delay times corresponding to respective predetermined transfer functions to the two-channel signals; and

an output unit for respectively supplying signals output from the pair of second filter means to left and right loudspeaker units of a headphone,

wherein the pair of second filter means each comprise a digital filter providing uncorrelated processing by setting

delay times corresponding to the respective predetermined transfer functions relating to reflective sound components using a delay unit for outputting a plurality of delay times, a multiplier for setting each delay time output to an arbitrary value, and an adder for adding each multiplier output.

--4. (Previously Amended) The audio processing apparatus according to claim 1, wherein the first filter means comprises a pair of digital filters having the same or equivalent transfer characteristics.

--5. (Previously Amended) The audio processing apparatus according to claim 1, further comprising detection means for detecting a rotational movement of the head of a listener wearing the headphone, wherein the uncorrelated processing of the respective predetermined transfer functions in the pair of second filter means is varied depending on an output from the detection means.

--6. (Previously Amended) The audio processing apparatus according to claim 5, wherein the detection means for detecting the rotational of movement of the head of the listener wearing the headphone is a piezoelectric

vibration gyro, and the uncorrelated processing corresponding to the respective predetermined transfer functions in the pair of second filter means is varied depending on an output from the piezoelectric vibration gyro.

--7. (Previously Amended) The audio processing apparatus according to claim 5, wherein the detection means for detecting the rotational movement of the head of the listener wearing the headphone is a geomagnetic azimuth sensor, and the uncorrelated processing corresponding to the respective predetermined transfer functions in the pair of second filter means is varied depending on an output from the geomagnetic azimuth sensor.

--8. (Cancelled)